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THE RELATION OF DEPRECIATION TO INVESTMENT[1]

By W. C. Hawley

This is a subject which until recently has received very little consideration from the management of most of our water companies. It was looked upon as theoretical, rather than a real thing seriously affecting the finances of the companies. Not many of our accountants and managers knew how to compute depreciation and very few water companies actually created and maintain a depreciation or replacement fund. We are only beginning, under public regulation, to realize the vital necessity of doing so.

Those of us who have owned automobiles for a few years have received practical and personal demonstration of the reality of depreciation. The machine that cost $2000 last year can be insured for only $1500 or less this year, and in from three to five years it must be replaced by a new one. It goes as part of the game; and when a new car is necessary we will write a check or mortgage the house and pay no more attention to it. But suppose by way of illustration, that a man in moderate circumstances invests his savings, and perhaps some money which he has to borrow, in an automobile and starts to operate a jitney or express route. Let us assume that he has no bad luck or accidents and that his earnings are sufficient to pay for gasoline, oil and repairs and give him and his family a living. At the end of five years we will assume that the jitney has to be scrapped. Then unless the owner has been setting aside from his earnings year by year a proper amount of money as a depreciation fund, he finds himself worse off than when he started. He has nothing to represent the savings which he put into the machine and the money he borrowed. His "plant" has been wiped out. He has no fund to replace it, and if he is to continue in business he must find new capital. This is only an illustration, but the principle is as true and operates as surely in the case of the property of a water works company or any other utility as it does in the illustration given. It is not only recognized in our public service company laws, but, as we shall see, public service companies have been severely penalized in the past because they have not provided depreciation or replacement funds.

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[1] Read before the Pennsylvania Water Works Association at Atlantic City on October 18, 1918, and printed in the Journal in order that the information may be available to the members of the American Water Works Association.

It is not necessary to consider carefully worded definitions of depreciation. Our chief difficulty is that the word has been used with so many different meanings. Depreciation as it affects us, is the reduction in value of our plants, due to age or change of conditions. There are various ways of estimating it, as the "straight line" method, "the sinking fund" method, the "equal annual payment" method, etc. When estimated for the period of one year it is spoken of as "annual depreciation," and when this depreciation is summed up for a period of years equal to the age of the unit considered, or the average age of the plant, we arrive at what is known as "accrued depreciation.'' Subtracting accrued depreciation from the original value of the plant, however that may have been computed, gives us the depreciated or present value of the physical plant.

What have we been doing in the past regarding depreciation? Many of us nothing, and most of us who have done anything have merely "charged off" depreciation. That is, year by year a certain amount has been added to the operating expenses and either the plant account reduced that much or a corresponding liability set up which was equivalent. Thus year by year the assets of our companies have been reduced and unless through excessive dividends an equivalent amount was returned to the stockholders, there has been no return to them of that portion of the original investment. In many cases the amount charged off as depreciation has been left in the business and practically it has been reinvested in the plant. The author will discuss this situation later.

The practical result of not creating a depreciation or replacement fund has been that when water works plants have been valued by the public service commissions, the historical cost has been determined where possible and also the cost of reproduction new, and from these and other considerations the value of the plant has been determined and from that figure the accrued depreciation has been subtracted. The Pennsylvania Public Service Commission, in the Beaver Valley Water Company case, subtracted an accrued depreciation of $215,175.11 from a "fair value new" of $1,187,286.11

which included, however, depreciable property to a value of $1,132,500.60. In the Ohio Valley Water Company case $88,661 accrued depreciation was subtracted from the reproduction cost of $1,083,825 (which included $10,000 working capital) while from the original cost of $841,343.00 accrued depreciation of $58,149 was subtracted. In the Westmoreland Water Company case from an original cost (including working capital of $10,000) of $1,266,292.51 accrued depreciation amounting to $185,701.85 was subtracted. This was the amount of depreciation which had been charged off on the books of the company and which had been estimated upon a valuation much higher than allowed by the Commission, but it was not reduced accordingly. From a reproduction value of $1,373,904.54, estimated accrued depreciation of $122,641 was subtracted. Thus we see the original investment reduced from 5 to 19 per cent; although not one dollar of this original investment has been returned to the stockholders. In the Westmoreland Water Company case, counsel for the Water Company attempted by argument to convince the public service commission that such a reduction was unjust. As a matter of fact, the money had not been taken out of the business, but had been invested in new plant to meet the public's demands for additional service. The practical condition was no different from what it would have been if the company had established a depreciation replacement fund by paying to a trustee or commissioner the amount charged off annually to depreciation and borrowing that money from the trustee, giving therefor the company's note and paying interest upon the money so borrowed. In a substantial water company this is probably one of the best methods of handling a depreciation fund. The answer of the Commission to this argument was as follows:

> "The argument that the money represented by these charges remained in the plant for the benefit of the public service is not convincing. Some of it may have gone into the plant to offset depreciation, but the fact remains that in the past the company has not maintained a depreciation account, but has charged renewals to operating expenses rather than to such a fund. Practically all of these charges must have gone into extensions and betterments, and hence are included in the total original cost as found by the Commission. The money has been returned to the stockholders just as surely as though it had been paid to them in cash. They have built extensions and betterments with the money represented by these charges instead of with new capital and therefore, under the argument presented by the respondent, the deduction is entirely justifiable."

The flaw in this argument is so manifest that it needs little discussion. There had been little, if any, replacement necessary because of depreciation in the plant of the Westmoreland Water Company. Its original reservoirs, supply mains and distributing system were and are still in service. What few minor items had been charged to operating expenses rather than to the replacement fund, if any, could readily have been deducted and the accounts corrected. The Commission admits that "practically all of these charges must have gone into extensions and betterments.'' If such an expenditure can be considered a return to the stockholders, it follows that merely charging off depreciation is not a sufficient compliance with the principles of good accounting, or with what the Public Service Commission considers to be the proper procedure in such a case The decision of the Commission not only wipes out for rate making purposes the cost of additions to plant since it was originally built, to the amount of the accrued depreciation, but it leaves the Water Company without a depreciation or replacement fund. To demonstrate this statement let us put the facts into the shape of a formula, assuming that a depreciation fund had been created.

Let P = original cost of plant.
Let A = additions to plant paid for from charges to depreciation.
Let a = additions to plant paid for by capital other than from charges to depreciation.
Then $(A + a)$ = total cost of additions to plant.
Let D = accrued depreciation.
Let F = depreciation or replacement fund.
Let I = total investment.

Then we will have

$$I = P + (A + a) - D + F$$

Since D and F are equal, this equation reduces to

$$I = P + (A + a)$$

In other words the original investment in plant and additions thereto has been maintained. Since no fund has been created, the Public

Service Commission says:

$$I = P + (A + a) - D$$

Assuming that the amount D has been completely expended in additions A
we have

$$A = D$$

and hence

$$I = P + a$$

This shows clearly that the company's investment has been reduced by the amount of depreciation charged off, and that the company has no asset to offset this loss. Surely this is not justice and does not accord with the decision of the United States Supreme Court in the Knoxville Water Company case which is quoted later.

Sound business principles require the setting aside of depreciation. The Pennsylvania Public Service Law provides:

> Article II, Section 1 (i). "It shall be the duty of every public service company to carry a proper and reasonable depreciation account, if required so to do by the order of the Commission."
>
> And also, (Article V, Section 15). "The Commission may, and shall after hearing had upon its own motion or upon complaint, establish by an order to be served, as hereinafter provided, upon every public service company affected thereby, a system of accounts to be used by such public service companies: and may also in its discretion prescribe the manner and form in which accounts, records and memoranda shall be kept by public service companies, including the accounts, records and memoranda of the conveyance of passengers and property and a proper and reasonable depreciation account, ..."

In carrying out these sections of the law, the Public Service Commission under date of March 25, 1918, prescribed and issued a Uniform Classification of Accounts for water companies, in which it provides for the keeping of an account to be known as "Depreciation of Structures and Equipment Reserve." This is on the asset side of the balance sheet, is a subtractive account and is identical with what has been generally carried as "Accrued Depreciation" on the liability side of the balance sheet. The Westmoreland Water Company was, therefore, carrying a depreciation account such as water companies are now required by the Public Service Commission to carry, and yet the assets of the company were reduced by the amount of that account with no offset, and this was justified by the claim that the money had been returned to the stockholders because it had been invested in extensions and betterments to the plant. Of course, in obtaining the value of the physical plant it was perfectly proper to subtract the amount of accrued depreciation. The gradual reduction in the value of the plant because of depreciation is a fundamental fact, but if the original investment is to be maintained intact there must be a corresponding asset equal in amount, and this is the depreciation or replacement fund.

By way of illustration of what this may mean to the investors in a water-works enterprise, let us assume that the original cost of a plant is $1,000,000, and we will consider that no additions are made to the plant; also that it is a pumping plant of ordinary construction, and that to create a proper depreciation or replacement fund to be invested on a 4 per cent sinking fund basis, 1 per cent per year of the original cost of the plant must be set aside. This means an average life for the plant of about forty-one years. Under these assumptions the amount in the replacement fund at the end of each year would be as follows:

First year	$10,000
Second year	20,400
Third year	31,261
Fourth year	42,465
Fifth year	54,163
Sixth year	66,330
Seventh year	78,983
Eighth year	92,142
Ninth year	105,882
Tenth year	120,061
Fifteenth year	200,236

These figures are based upon the assumption that there had been no replacements made. This would probably be true for the first ten or twelve years, and we might then reasonably expect replacements requiring money to be taken from the replacement fund. If, however, at the end of fifteen years this company met with a rate case requiring the valuation of its plant, it will find its plant value reduced by 20 per cent of the original investment, and according to decisions up to the present, unless it has the equivalent funds in a depreciation or replacement fund it has nothing to offset this loss. This is, of course, upon the assumption that the earnings of the plant have not been excessive and hence there has been no return of this amount or any part of it to the stockholders.

Against this method of valuation, we have the decision of the Supreme Court of the United States in the case of Knoxville vs. Knoxville Water Company:

> "A water plant with all its additions, begins to depreciate in value from the moment of its use. Before coming to the question of profit at all, the company is entitled to earn a sufficient sum annually to provide not only for current repairs but for making good the depreciation and replacing the parts of the property when they come to the end of their life. The company is not bound to see its property gradually waste, without making provision out of its earnings for its replacement. It is entitled to see that from earnings the value of the property invested is kept unimpaired, so that at the end of any given term of years the original investment remains as it was at the beginning. It is not only the right of the company to make such a provision, but it is its duty to its bond and stockholders, and, in the case of a public service corporation at least, its plain duty to the public."

Surely nothing could be plainer than that, and yet in decision after decision of the various State Utility Commissions, accrued depreciation has been subtracted without any regard to whether or not it has ever been earned, or if earned it has ever been returned to the stockholders.

Arguments in the effort to convince Commissions of the correctness of this theory have been made so often, only to be ignored, that it seemed almost as hopeless as the effort to convince the Commissions that "going value," "cost of establishing business," or "the value of establisted business,"—whatever one chooses to call it,—has a separate and distinct cost and value over and above that of the physical plant. It was, therefore, with surprise and pleasure that the author noted the decision of the Wisconsin Railroad Commission handed down June 1, 1918, in the case of the Milwaukee Electric Railway and Light Company, et al., vs. City of Milwaukee. (P. U. R. 1918-E). In this decision the Commission says:

> (11) "As reproduction cost new is not necessarily to be taken as representing fair value, it seems equally clear that reproduction cost new less depreciation cannot be so taken. What is to be ascertained is the amount fairly representing the prudent and honest investment made by the owners of the

utility. They are entitled to have that contribution kept intact until returned to them. In other words those that have contributed to the utility are, under normal conditions, entitled to a fair return on the amount of such investment while it remains in the utility. Whether that sum be arrived at on the original cost (physical property) or investment basis (and the two may be identical) the investor is entitled to a return on this amount, assuming that no part of his investment has been returned. If this amount, on the other hand, is taken as fairly represented by reproduction cost, the same principle would seem to apply; for reproduction cost less depreciation does not of itself establish the return of any part of the investment to the investor. Reproduction cost new less depreciation can be used as the final measure of fair value for rate making purposes only upon the assumption that the utility has not only earned the sum represented by depreciation in excess of a fair return on the original investment, but has also returned the same to the investors, retaining no depreciation reserve represented by assets. Where reproduction cost less depreciation is used as controlling in determining fair value unless the amount earned to provide for depreciation is returned to investors, it will not usually earn a return sufficient to constitute a fair return on the investment. Where the reserve is provided on a straight-line basis and retained by the utility, any interest earned on assets offsetting the reserve would constitute income of the utility. If the reserve assets are held in the business and the reproduction cost less depreciation is used as a basis for the valuation, a return upon such reproduction cost less depreciation at the normal rate, plus interest earned upon reserve assets, would be less than a fair return upon the investment unless a rate of interest were actually earned upon such reserve assets equal to the rate which constitutes a fair return for the property as a whole. Where reserve assets actually earn less than a fair rate of return upon the investment as a whole, the only way that occurs to us in which investors can obtain a fair return upon their full investment is by earning a higher rate on the cost new less depreciation than would be required if the investment, as already discussed, were used as a basis. Unless the rate of return on the cost new less depreciation is to be enough higher than the rate which should be applied to the investment to bring the total return, which is made up of the return on cost new less depreciation and interest earned on reserve assets, the reserve being provided on a straight-line basis, up to an amount which would constitute a fair rate of return on the investment, we see no way in which the investor, under such a method of valuation would secure a fair return on this investment, unless it is to be assumed that amounts earned for depreciation can be withdrawn from the business and the investment thereby diminished. This principle was fully established in the Knoxville Water Co. case."

Then follows the quotation from the Knoxville case which has been given above.

This is the clearest statement of the principles under consideration that we have seen, and gives evidence that not only are we progressing toward a full understanding of the principles involved in valuation and rate regulation, but that our public service commissions when convinced of the correctness of a principle will deal justly with the public service corporations, even to the extent of reversing rulings laid down in former decisions. We may be dissatisfied with some of the things which the commissions have done, but let us remember that they and the utilities are working out a comparatively new proposition which promises much good both for the public and the utilities. We are traversing a path which has only been charted by broad statements of principles in the few legal decisions which have been handed down in such cases. Our courts in the few rate or valuation cases reported have avoided criticism by not giving the details of the calculations by which they arrived at values. Some such statement as "taking into consideration this and that and all of the other matters which bear upon this question, we find so and so" has protected many a valuation from an attack which should have resulted in reversal by the higher courts. The Commissions, however, as a rule have wisely adopted the plan of publishing the calculations by which they arrive at values. Some of the calculations are simple and the principles well understood and agreed upon. Others are involved, difficult of determination, with at least some of them still the subject of doubt and disagreement. Depreciation and its treatment in accounting and in valuation and rate making has been one of these. This Milwaukee decision is a milestone on the road of progress.

In the Uniform Classification of Accounts for water companies, prescribed by the Public Service Commission of Pennsylvania, to which previous reference has been made, we find that fixed capital has been divided into two accounts,—that installed prior to January 1, 1918, and that installed since December 31, 1917, the latter having been classified in accordance with prescribed accounts, and that the next account, No. 102, is called "Depreciation of Structures and Equipment Reserve." This, as previously explained, is a subtractive account, and in most of our bookkeeping has been called "Accrued Depreciation," and carried as a liability. This liability has been brought to the other side of the page and made a "red asset," by the same principle as that involved in algebra when we take a quantity from one side of the equation to the other, by changing its sign, and do not affect the correctness of the equation by doing so. This is something new to most of us, but it is quite generally approved by expert accountants and is already in use by a large number of our great industrial corporations. The advantage of it is that by subtracting the account from the total of the fixed capital, there is shown at once the present or depreciated value of the physical plant. The use of the word reserve in this sense is probably unfortunate. The Century Dictionary defines reserve as: "That which is reserved or kept for other or future use; that which is retained from present use or disposal." The fund which is accumulated and set aside to pay for replacements is a reserve or reserve fund, but it is not clear how the accumulated losses in value due to depreciation can be called a reserve. However, the account known as "Depreciation of Structures and Equipment Reserve" is clearly explained in the printed text accompanying the Uniform Classification.

This explanation states that there is to be credited to this account and charged to account No. 402, "Depreciation," that amount which it is estimated will, through regular application, over the life of the structures and equipment of the various divisions of the utility water system, be sufficient to provide an adequate reserve to cover those expenses of depreciation that accrue upon such structures and equipment. This, and what follows, is clear and easily understood, but unfortunately neither here nor elsewhere do we find any statement regarding a depreciation or replacement fund, and yet, as we have seen, water companies have been practically penalized because they had not established such funds. It would seem as though there should have been provided a special place under the Asset Accounts for this fund. Inquiry of the Bureau of Accounts and Statistics was answered to the effect that the proper procedure in creating a fund would be to charge account No. 113, "Insurance and Other Reserve Fund Assets," subaccount —"Depreciation Reserve Fund," and to credit account No. 117, —"Cash." In other words, the amount charged to Depreciation each year is to be taken from Cash and put into a Depreciation Reserve Fund or a Depreciation Replacement Fund, which fund is to be carried as a subaccount under account No. 113.

William Morse Cole, in his book entitled "Accounts, Their Construction and Interpretation," gives (page 84) three sample Balance Sheets, showing methods of treating depreciation as follows:

BALANCE SHEETS

ASSETS		LIABILITIES	
First year—all plans			
Plant	$90,000	Stock Bonds	$90,000
Second year—Plan I			
Plant	$80,000	Stock	$90,000
Depreciation fund	$10,000	Bonds	
Second year—Plan II			
Plant	$90,000	Stock	$90,000
Miscellaneous assets increased	$10,000	Bonds Depreciation	$10,000
Second year—Plan III			
Plant	$80,000	Stock	$90,000
Miscellaneous assets increased	$10,000	Bonds	

Plan II he calls objectionable and Plan III seems even worse, and yet most of us have been using either one or the other of them. Commenting on them Cole says:

> To summarize what has been said of the depreciation fund, then, we find that it may appear on the balance sheet in one of three combinations: (1) among assets only,—in which case specific property is set aside to replace or repair machinery, or buildings, or what not, that are thought to have suffered actual depreciation; (2) among both assets and liabilities,—in which case specific property is set aside from net income as a safety fund for possible depreciation not thought to be actual; (3) among liabilities only,—in which case the amount is deducted from net income and shown on the books as a safety fund for replacement purposes, but the actual property is left among the general assets without specific designation. In the first case the fund could not be distributed to stockholders without impairing capital; in the other two cases the policy might be changed and the fund distributed without affecting capital, though such distribution might be morally and legally unjustifiable as a violation of implied faith.

Our Public Service Commission has adopted Plan I, and has improved on it by showing Plant or Fixed Capital at its original amount from which is to be subtracted the accrued depreciation, account No. 102, and the depreciation or replacement fund appears as a subaccount of account No. 113.

There is much of interest in Cole's book, which might be quoted here, but only the following paragraph will be added:

> Has it cost the corporation anything to accumulate this fund? If our real estate and plant are wearing out and are profitably employed, it is

obvious that they are reproducing themselves in the annual product. It follows, therefore, that, if the corporation cannot take from the annual product and lay aside as a depreciation fund the equivalent of the annual wear and tear of the real estate and plant, it is running down hill. In other words, that depreciation fund was created, day by day, in the regular product of the business. Real estate and plant, by constant use, have been slowly converting themselves from building and machinery into merchandise. It is the business of the accountant to see that that conversion is recognized and recorded. The surest way to keep it clearly in mind is to take the proceeds from the sale of some of that merchandise and set it aside as a special depreciation fund. Such a depreciation of real estate and plant is loss, of course; but it is loss only in the sense that consumption of raw material is loss; it reappears in the form of goods, and a certain part of the product must be recognized in that form as converted depreciation.

From the foregoing it seems evident that a water company in order to maintain its investment at 100 per cent has the right to earn year by year an amount sufficient to offset its loss by dedepreciation, and its duty to its stockholders and to the public to set this aside in a fund to take care of replacements as they become necessary. Whether the annual amount of depreciation should be based on the "straight line" or "sinking fund" plan is a matter about which opinion has differed. There are cases where the "straight line" plan should be used, but the consensus of opinion seems to be in favor of the "sinking fund" plan. The subject is discussed by the Wisconsin Railroad Commission in the Milwaukee Electric case with this conclusion:

"In our opinion a most equitable situation arises where depreciation is calculated and provided on a "sinking fund" basis. The fund should be in the custody of a commissioner or trustee, to be invested by him, subject to call for money with which to make replacements when necessary."

On this subject the Wisconsin Commission in the same decision says:

"The amount collected for depreciation can be treated in one of several ways. It can be loaned subject to call on very moderate rates of interest, being treated as a special trust fund represented by quick assets. It can be used from time to time to, temporarily at least, finance extensions and improvements. A considerable part of it, however, should at all times be immediately available for the purpose for which it is raised. However treated, it will be drawing some interest whether loaned or temporarily invested in extensions and improvements. Were it to be permanently invested in such extensions and improvements it would theoretically be earning interest

> at the same rate as the original investment. As a matter of practice, however, this probably does not happen. As a rule, some time elapses after the expenditure before much additional return is earned on the new property. The fund is subject to be called upon at any time for the use for which it has been laid aside, and such extensions and improvements in a growing concern, at least, are usually financed, before the lapse of any extended period, by the issue of new securities."

In addition to these suggestions it would seem that in the case of a company which is strong financially, the trustee could lend the funds in his hands to the company on its note or notes, at the low rate of interest at which the annual payments have been calculated, reserving a sufficient amount on hand, on deposit or loaned on call, to take care of such ordinary replacements as are likely to occur. If some unusual demand for replacement should be made, the trustee could demand payment by the company of a sufficient amount on its note or notes to meet the demand for cash from the replacement fund. This would seldom occur, and if it did, the company would, in the meanwhile have had the advantage of the use of funds at a low rate of interest instead of having to sell bonds or stock or borrow from bank at bank rates of interest. The time when new capital had to be procured would thus have been deferred.

There is one other fact in the consideration of this subject which we must grasp clearly and insist upon. That is that the investor has the right to a reasonable return not only upon the depreciated value of the plant, but upon the replacement fund; for this fund is what maintains his investment at its original amount or value. But, it will be argued: "The fund is earning interest and you are asking a double return on it." The answer to this argument is that because the fund earns interest the annual amount paid into the depreciation fund is less than it would be otherwise, and the interest that the fund earns becomes part of the fund and is not returned to the investor. Both the annual payment and the interest are necessary to create a fund sufficient to make replacements as they are required, assuming that the calculations on which the fund is based are correct. This would not be true if the fund were created on the "straight line" basis, as was pointed out by the Wisconsin Commission in the Milwaukee case. Assume that a plant has cost $100,000. There can be no question of the right of the investors in that plant to earn a reasonable return upon that amount the first year. Suppose that the depreciation amounts to

$10,000 in the first year, and a replacement fund of that amount is set aside from earnings. Shall the reasonable return for the second year be based on an investment of $90,000 and this amount reduced year by year? If the balance sheet shows,

ASSETS *Account number*			LIABILITIES	
100 101	Fixed Capital	$100,000		
102	Depreciation of Structures and Equipment Reserve (Red)	10,000		
	Depreciated Plant Value	90,000	Stock Bonds	$100,000
113	Depreciation Replacement Funds	10,000		
		$100,000		

the answer is plain.

Since preparing the foregoing, the author's attention has been called to the decision of the Indiana Public Service Commission, Re: United Public Service Company of Rochester, Ind., P. U. R., 1918-F, page 316. In passing upon the matter of depreciation the Commission comments as follows:

> "The Commission is confronted with the fact that, after five years' operation of the law in Indiana, the intent of the depreciation provisions has not been realized. The practice, both in this state and elsewhere, is to dissipate these moneys.
>
> In estimating allowances to be made to cover depreciation, the Public Service Commission of Indiana adopts a rate allowance which presupposes that moneys provided to meet deferred depreciation shall not lie idle. Such moneys create the "depreciation fund." If this fund compounds itself, then the rate of allowance to cover depreciation may be made lower than otherwise. In other words, a fund so administered means a lower rate to the patrons or consumer than if such fund is not interest bearing. For the utility, the creating of such an actual depreciation fund constitutes an asset that should favorably influence its credit. In times of stress or disaster a utility having such a fund may be able to either borrow from this fund or convert or pledge securities held in such fund, and thus be relieved of heavy discounts otherwise incurred.
>
> Sound and desirable as is the theory, the practice in this and other states is almost universally different. Depreciation moneys are paid out in dividends or used in other ways. The result is that in may cases the "depreciation fund" is a meaningless bookkeeping account. There is no reserve

fund, though the patrons have provided money for such a fund. The public utility is, instead of being financially fortified, reduced to the practice of merely charging off annually on its books a certain amount of the value of its property, reducing rather than maintaining its property value. Often this is finally reflected in poor service. The consumer who has provided proper funds is penalized in service because of improper administration.

The appended order provides that this utility shall take out of its revenues—the same as it will take moneys for operation, taxes, interest, and dividends—the money allowed and collected under the law, for depreciation; that it will pay such moneys into a depreciation fund; that such funds shall be held intact and separate at all times; that there shall be paid out of such funds all cost—including labor as well as materials—of replacing depreciation; that the funds shall be administered with proper accounting; that interest on such depreciation funds shall accrue not to the utility, but to the fund; that petitioner itself may, with limitations, borrow from the fund, but in such event shall place in said fund its own obligations, in the form of notes or bonds bearing interest payable to the fund.

The order does not contemplate that, when depreciation funds are borrowed by the utility itself, there shall be a mere bookkeeping account. In other words, the moneys derived from allowances to cover depreciation that are made in rates are to be regarded as a trust fund provided, as prescribed by law, by those served for the benefit of the utility, but not in reality belonging to it until such moneys are translated into actual plant replacements; and such fund must be handled, at the utility's risk, to the best advantage of the consumers and patrons and stockholders and bondholders.